Corrigendum to "GLOWORM-PARA

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Corrigendum

Corrigendum to "GLOWORM-PARA: a flexible framework to simulate the population dynamics of the parasitic phase of gastrointestinal nematodes infecting grazing livestock" [Int. J. Parasitol. 50 (2020) 133–144]

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The authors regret an error in the R code used for model validation using the *Cooperia oncophora* parameters. Correcting this error results in minor changes to the validation statistics and plots for *C. oncophora*. However, conclusions remain unchanged and readers wishing to replicate the analyses or view corrected statistics can refer the updated Table 3, Fig. 3, Fig. 4 and supplementary data here.

The authors would like to apologise for any inconvenience caused.

Table 3
Validation of simulations for faecal egg counts (FEC) of *O. ostertagi* and *C. oncophora* using parasitological data of first season grazing animals on seven commercial dairy herds in Belgium.

	Ostertagia ostertagi				*Cooperia oncophora*			
Dataset	Error (residual sum of squares)	Linear regression	R^2 (R^2 adjusted)	Slope (95% CI)	Error (residual sum of squares)	Linear regression	R^2 (R^2 adjusted)	Slope (95% CI)
Herd 1	37.69	$F_{1,5}$ = 6.89, p=0.047	0.58 (0.50)	0.71 (0.19–1.24)	68.17	$F_{1,5}$ = 1.004, p=0.362	0.17 (−0.0007)	0.26 (0.25–0.78)
Herd 2	10.11	$F_{1,3}$ = 13.35, p=0.035	0.82 (0.76)	0.14 (0.07–0.22)	68.34	$F_{1,3}$ = 47.11, p=0.006	0.94 (0.92)	0.49 (0.35–0.63)
Herd 3	0.61	$F_{1,2}$ = 766.7, p=0.001	1 (1)	0.71 (0.66–0.76)	6.094	$F_{1,2}$ = 257.4, p=0.004	0.99 (0.99)	4.08 (−3.59–4.57)
Herd 4	8.38	$F_{1,6}$ = 7.00, p=0.038	0.54 (0.46)	0.77 (0.20–1.33)	5.77	$F_{1,6}$ = 6.53, p = 0.043	0.52 (0.44)	1.28 (−0.30–2.27)
Herd 5	47.31	$F_{1,3}$ = 15.1, p=0.030	0.83 (0.78)	1.71 (0.85–2.57)	300.9	$F_{1,3}$ = 8.71, p = 0.060	0.74 (0.66)	11.98 (−4.02– 19.93)
Herd 6	9.42	$F_{1,4}$ = 30.35, p=0.005	0.88 (0.85)	2.54 (1.64–3.45)	85.29	$F_{1,4}$ = 6.0, p=0.071	0.60 (0.50)	6.88 (−1.37–12.39)
Herd 7	7.39	$F_{1,2}$ = 3.84, p = 0.189	0.66 (0.49)	0.19 (−0.0002–0.39)	2.14	$F_{1,2}$ = 5.62, p = 0.141	0.74 (0.61)	0.06 (0.01–0.11)

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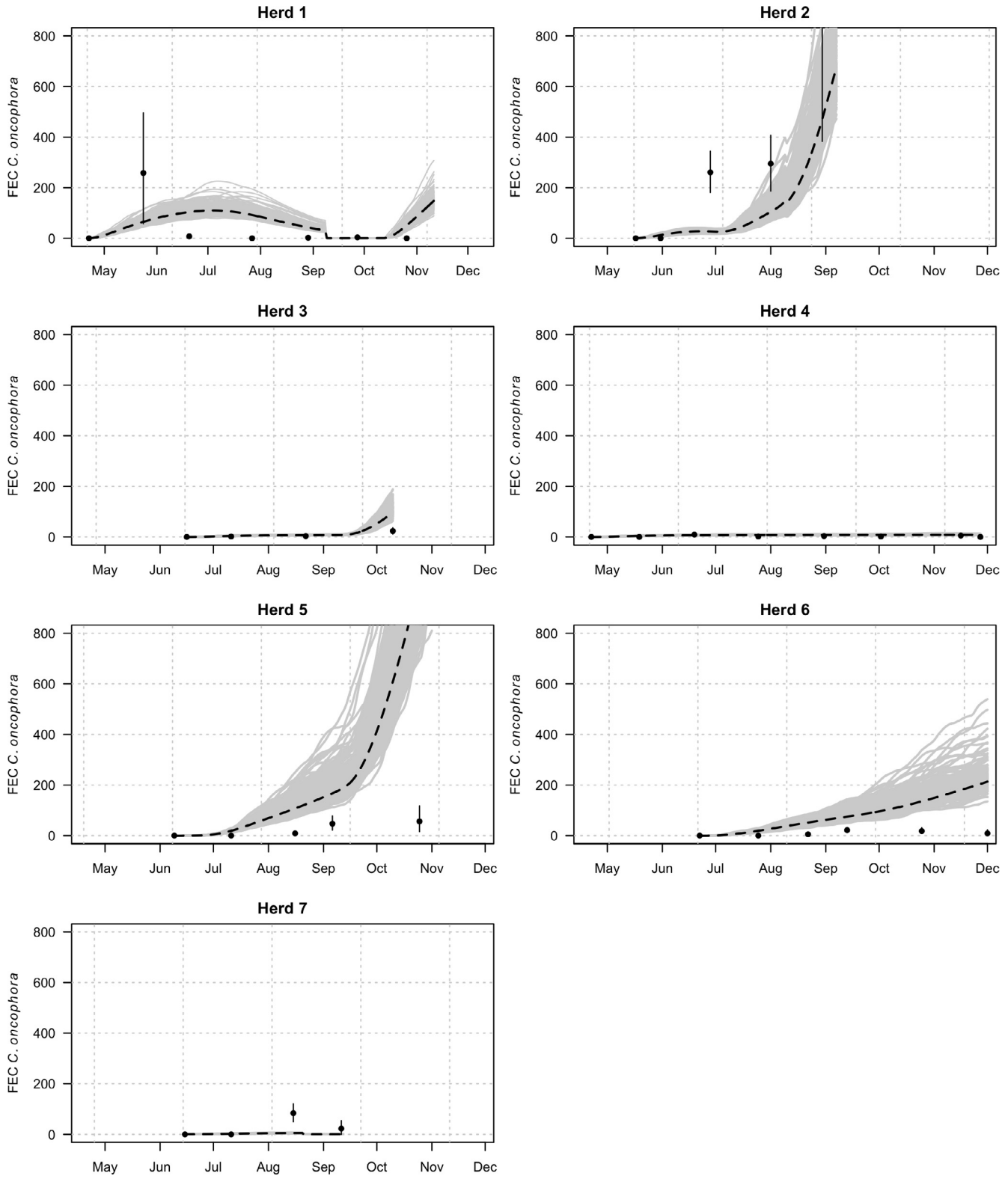

Fig. 3. Observed and predicted faecal egg counts for Cooperia oncophora in first season grazing animals of dairy herds in Belgium. FECs were monitored for the entire length of the first grazing season. Further information on the background of this data can be found in Supplementary Table S1. Points and error bars show the observed number of eggs per gram of faeces and the corresponding 95% confidence interval obtained by bootstrapping (10,000 repeats). The dashed black line depicts the predicted FEC for a group of hosts based on a deterministic model simulation. The solid grey lines depict predictions obtained from 50 model simulations representing individual hosts, in which stochastic L3 intake and between-host variability in immune response were incorporated.

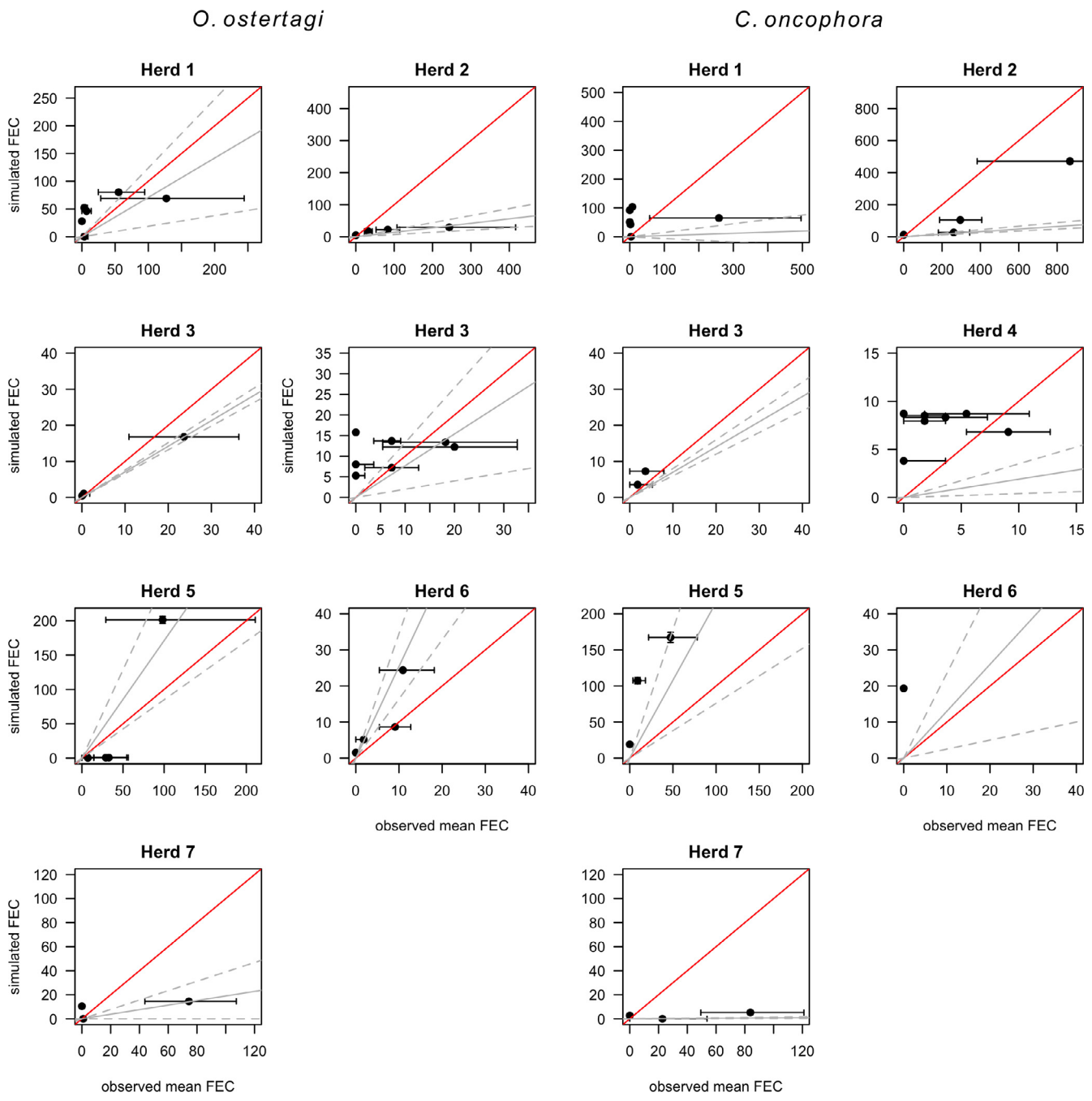

Fig. 4. The observed and simulated faecal egg counts (points) with 95% confidence intervals (observed = horizontal, simulated = vertical). The diagonal black line indicates hypothetical perfect agreement between the observed and simulated faecal egg counts. The grey solid line indicates the predicted slope of the regression, with 95% confidence intervals shown as grey dashed lines. Note that the 95% confidence intervals for the simulated data (estimated using the stochastic simulations shown in grey in Fig. 2, Fig. 3) are narrow and may not be easily seen due to the scale of the Y-axes.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijpara.2021.05.001.